

**Elabarger, Mike**

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**From:** Giglio, Patrick  
**Sent:** Thursday, February 18, 2010 1:19 PM  
**To:** Elabarger, Mike  
**Cc:** Keegan, Cynthia  
**Subject:** CWS Exit 5 Claiborne Parkway

Staff has reviewed the most recent submittal dated January 12, 2010. Staff finds that the submitted materials adequately address and clarify those issues raised in the first referral. Staff recommends approval of the Commission Permit and Special Exception application with conditions.

Pat Giglio, Planner III  
Loudoun County Department of Planning  
703-777-0246 (office)  
703-737-8563 (direct)

ATTACHMENT 1

A-01

**County of Loudoun**  
**Department of Planning**  
**MEMORANDUM**

**DATE:** December 7, 2009

**TO:** Mike Elabarger, Project Manager, Land Use Review

**FROM:** Pat Giglio, Planner III, Community Planning

**SUBJECT: SPEX 2009-0030 & CMPT 2009-0009 – CWS Exit 5 Claiborne Parkway**

**EXECUTIVE SUMMARY**

The applicant, Community Wireless Structures, LLC., is requesting a Special Exception (SPEX) and Commission Permit (CMPT) to construct a 155' monopole and ground-mounted equipment shelter to accommodate a mobile telecommunication facility. The site is located south of the Dulles Greenway (Route 267) and east of Claiborne Parkway (Route 901) within the right-of-way for the road interchange at Exit 5 in Ashburn. The subject site is currently zoned Planned Development-Housing (PD-H3) under the Revised 1993 Loudoun County Zoning Ordinance. A Special Exception and Commission Permit are required for the proposed telecommunication use within the zoning district. The proposed use of the subject site for a telecommunication facility is supported and in conformance with the general location and design policies outlined in the Revised General Plan and Strategic Land Use Plan for Telecommunications Facilities. Staff recommends approval of Commission Permit and Special Exception with conditions.

**BACKGROUND**

The applicant, Community Wireless Structures, LLC., is requesting a Special Exception (SPEX) and Commission Permit (CMPT) to construct a 155' monopole to accommodate a mobile telecommunication facility on a site located south of the Dulles Greenway (Route 267) and east of Claiborne Parkway (Route 901) within the right-of-way for the road interchange at Exit 5 in Ashburn. The proposed mobile telecommunication facility will consist of a 155' monopole with an antennae array located near the top of the pole, and an additional antennae array and dish antenna further down the pole with space reserved for a minimum of five (5) additional future antennae arrays. Two concrete pads with ground-mounted equipment will be located near the base of the monopole within the fenced compound (60' x100') and lease area initially. Additional areas for future

A-02

ground-mounted equipment cabinets have been reserved within the fenced compound. The equipment compound will be enclosed by an eight-foot, wooden, stockade fence over a chain link fence that will be screened by existing trees and vegetation on the site. The applicant is requesting a wavier of the Type 3 yard requirement for the subject site since the existing trees and vegetation is being used in lieu of plantings.



View Southeast from Greenway.

The subject site is currently zoned Planned Development-Housing (PD-H3) under the Revised 1993 Loudoun County Zoning Ordinance. A Special Exception is required for the proposed telecommunication use within the zoning district. Additionally the zoning ordinance required a Commission Permit when a public utility or public service facility is constructed. A Commission Permit is used to determine if the general location, character, and extent of the proposed use is in substantial accord with the Comprehensive Plan. A site visit and review of County GIS records did not identify any significant environmental features on the subject site. The construction of the proposed access drive and equipment compound will require clearing and grading which will cause the removal of some existing trees and vegetation.

## **COMPREHENSIVE PLAN CONFORMANCE**

The site is located in the Ashburn Community within the Suburban Policy Area and is governed under the policies of the Revised General Plan (the Plan). The Revised General Plan designates this area for Residential uses (Revised General Plan, Chapter 7, Planned Land Use Map). The proposed use is specifically governed under the policies of the Strategic Land Use Plan for Telecommunications Facilities (*Telecommunications Plan*).

## **ANALYSIS**

### **A. LAND USE**

#### **Location**

The Telecommunication Plan policies establish a hierarchy of preferred locations for new commercial public telecommunication facilities in the County. The County's first preference is for new telecommunication facilities to collocate on existing buildings, towers, monopoles, water tanks, overhead utility transmission line structures and other tall structures where possible to minimize the need for new structures (*Telecommunications Plan, Countywide Location Policies, Policy 1*). If existing tall structures are not available, the County prefers that new towers or monopoles be located in planned and zoned industrial and employment areas within the Suburban Policy Area subject to performance standards to mitigate visual impacts (*Telecommunications Plan, Countywide Location Policies, Policy 3*). Additionally the County encourages the location of telecommunication facilities on light poles and other existing tall structures in the right-of the Dulles Greenway and VDOT arterial roads (*Telecommunications Plan, Urban Location Policies, Policy 2*).

The proposed site was selected by the applicant to improve the quality of wireless coverage along a segment of the Dulles Greenway and to provide enhanced in-home service for the Broadlands and Ashburn Community where service currently exists as demonstrated by the submitted radio frequency ("RF") coverage maps. Based on a search of the area, it was determined that no existing tall structures of sufficient height were present within the desired coverage area for the network and that a new facility may be justified based on network coverage requirements. All the major road interchanges within the Suburban Policy along the Dulles Greenway (Exits 3, 4, 6 & 7) with the exception of the subject site feature telecommunication facilities with monopoles ranging from 162 to 191 feet in height.

***Staff finds that no existing tall structures are currently located within the vicinity of the proposed site and that construction of a new telecommunication facility may be justified based on network coverage requirements.***

### **Design and Visual Impact**

The Plan calls for design standards to mitigate the visual impacts of commercial public telecommunication facilities so as to "blend with the natural and built environment of the surrounding area" (*Telecommunications Plan, Countywide Visual Impacts, Policy 1*). The Plan directs that specific attention be paid to the setting, color, lighting, topography, materials, and architecture. Antennas and other telecommunication devices should be neutral in color to blend with the background, unless specifically required by the FAA to be painted or lighted otherwise (*Telecommunications Plan, Countywide Visual Impacts, Policy 2*). Accessory structures and equipment buildings should also blend with the surrounding environment through the use of appropriate color, texture of materials, scale, landscaping and visual screening (*Telecommunications Plan, Countywide Visual Impacts, Policy 3*).

The proposed telecommunication facility on the subject site will consist of a 150-foot monopole with 5-foot lighting rods and can accommodate up to seven (7) telecommunications providers at the proposed facility. Associated ground-mounted equipment cabinets will be located at the base of the monopole within a fenced compound (60' x100'). The compound will be enclosed by an eight-foot, wooden stockade fence over a chain link fence that will be screened by existing onsite vegetation. Staff recommends that the conditions of approval and general plat notes specify the color, texture, and materials of the proposed monopole and associated ground-mounted equipment shelters to ensure that the proposed construction is consistent with the submitted photo-simulations and drawings.

The applicant is requesting a wavier of the Type 3 landscape buffer requirements for the subject site since the existing vegetation and trees will be used in lieu of plantings. The presence of existing mature trees and vegetation provides a superior vegetative buffer which will screen the equipment compound and base of the proposed monopole from motorists and helps to mitigate the overall visual impact created by the proposed telecommunication facility on the surrounding commercial and residential areas. Staff supports the waiver request and recommends that the applicant commit to the long-term maintenance and care of the proposed fence and existing trees and vegetation to ensure that the proposed facility is adequately screened. Special precautions should be taken during the construction process to protect the exiting trees and vegetation from damage (i.e. root trenching and safety fencing).

***Staff finds the design of the proposed telecommunication facility is in general conformance with Plan policies. Staff recommends that conditions of approval and the general notes of the plat specify the color, texture, and materials of the proposed monopole and ground-mounted equipment to ensure that the proposed construction is consistent with the submitted photo-simulations and drawings.***

***Staff supports the applicants request for a waiver of the Type 3 landscape buffer and the use of the existing trees and vegetation on-site to screen the proposed facility. Staff recommends that the applicant commit to the long-term maintenance and care of the proposed fence and existing trees and vegetation to ensure that the proposed facility is adequately screened.***

## **B. SAFETY AND HEALTH POLICIES**

Plan policies state “an applicant or its successors shall remove all unused structures and facilities from a commercial public telecommunications site, including towers and monopoles, within 90 days of cessation of commercial public telecommunications use or the expiration of the lease, whichever occurs first, and the site should be restored as closely as possible to its original condition” (*Telecommunications Plan, Safety and Health Policies, Policy 2*).

***Staff recommends that a condition of approval and/or plat note be included to require removal of the facility and associated equipment following cessation of use.***

## **RECOMMENDATION**

Staff finds that the application is in conformance with the general location and design policies outlined in the Revised General Plan and Strategic Land Use Plan for Telecommunications Facilities. Staff recommends approval of the Special Exception application provided that the applicant commit to the long-term maintenance and care of the proposed fence and vegetative landscape buffer to ensure that the proposed facility is adequately screened. Staff also recommends that a condition of approval and/or plat note be included which specifies the color, texture, and materials of the proposed monopole and ground-mounted equipment to ensure that the proposed construction is consistent with the submitted photo-simulations and drawings, and following cessation of use the applicant will be required removal of the facility. Staff recommends approval of the subject Special Exception with conditions.

Staff finds the general location and use of the subject site for a telecommunication facility is in conformance with the policies of the Revised General Plan and Strategic Land Use Plan for Telecommunications Facilities. Staff recommends approval of the Commission Permit.

cc: Julie Pastor, AICP, Planning Director  
Cindy Keegan, AICP, Program Manager, Community Planning – via e-mail

A-06

**Elabarger, Mike**

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**From:** Siebentritt, Heidi  
**Sent:** Thursday, December 10, 2009 11:59 AM  
**To:** Elabarger, Mike  
**Cc:** Salinas, Michael; Giglio, Patrick  
**Subject:** SPEX 2009-0030&CMPT 2009-0009 CWS Exit 5 Claiborne Parkway

Mike,

The Phase 1 archaeological survey was waived for this application at submission. I have reviewed the application including the Section 106 Coordination Report that was submitted with the application. There are no heritage resource issues associated with this application. I hope this e-mail will suffice for your files. Please let me know if you wish a more formal memo.

Heidi



COUNTY OF LOUDOUN  
MEMORANDUM  
DEPARTMENT OF BUILDING AND DEVELOPMENT

**DATE:** February 1, 2010

**TO:** Mike Elabarger, Project Manager, Department of Planning

**FROM:** Theresa M. Stein, Planner, Zoning Administration

**CASE NUMBER AND NAME:** SPEX 2008-0030/CMPT 2009-0009, CWS monopole at Exit 5 (Claiborne Parkway) of the Dulles Toll Road – 2<sup>nd</sup> submission

**TAX/MAP PARCEL NUMBER:** /60/////7BTR1

**MCPI:** 234-37-8457

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Zoning staff has reviewed the applicant's response to zoning comments, dated January 13, 2010, the Special Exception Plat, revised through January 15, 2010, and the Statement of Justification, revised January 15, 2010. The following comments were outstanding with the 2<sup>nd</sup> submission and addressed in this submission:

1. Original comment #5: "*State the proposed square footage and height of the equipment structure per 5-618(B)(3)(f).*" The applicant responded that the height and square footage of the equipment shelters are on sheet 10. The dimensions of the proposed equipment structures pads are on sheet 10, but the square footage and height of the equipment structures were not provided as requested. The comment remains outstanding.
2. Original comment #7: "*Demonstrate that location on an existing structure greater than 40' is not feasible per 5-618(B)(4)(b).*" Applicant responded in the January 13<sup>th</sup> letter that the information was "to be supplied by others." The revised Statement of Justification now includes the requested information on page 2 and 3, however, the Ordinance requires that the applicant demonstrate that antenna cannot be placed on existing structures over 40' in height. Alternative locations titled (a) and (b) in the Statement of Justification states that there are no "existing structures 50 feet or taller on this property". The applicant needs to explain why those sites cannot accommodate the proposed antenna as they exceed 40' in height. The reference to 50' height may be an error, and such information was provided to the applicant's representative via email on January 22<sup>nd</sup>.



COUNTY OF LOUDOUN  
MEMORANDUM  
DEPARTMENT OF BUILDING AND DEVELOPMENT

**DATE:** November 30, 2009

**TO:** Mike Elabarger, Project Manager, Department of Planning

**FROM:** Theresa M. Stein, Planner, Zoning Administration

**CASE NUMBER AND NAME:** SPEX 2008-0030/CMPT 2009-0009, CWS monopole at Exit 5 (Claiborne Parkway) of the Dulles Toll Road

**TAX/MAP PARCEL NUMBER:** /60/////7BTR1

**MCPI:** 234-37-8457

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The application is to request a special exception and a commission permit to construct a 155' monopole, which includes a 5' lightning rod, and will accommodate a total of 7 providers, at Exit 5 of the Dulles Toll Road (Rt 267). One provider, T-Mobile is proposed to have 12 panel antennas and another provider, Clearwire is proposed to have 3 panel antenna and 3 microwave dishes. The other 5 providers are unknown at this time. The subject site is zoned Planned Development – Housing 3 (PD-H3) under the Revised 1993 Loudoun County Zoning Ordinance (Ordinance). A monopole is a special exception use in all zoning districts within the right of way of a private toll road per Section 5-618(B)(2)(d), provided it meets the standards found in Section 5-618(B)(3) and (4).

Zoning staff has reviewed the Statement of Justification and Special Exception Plat, revised through October 30, 2009, a letter dated August 24, 2009 from Community Wireless Structures to the Department of Building and Development, a letter dated September 21, 2009 from TreesPlease to Thomas Murray of Community Wireless Structures, and offers the following comments:

**COMPLIANCE WITH SECTION 5-618(B)(3) and (4):**

1. Add to the height requirement box on sheet 8 the height of the lightning rod.
2. On sheet 8, state the number of providers to be accommodated per 5-618(B)(3)(b).
3. Add the required setback per Section 5-618(B)(3)(c) to the setback boxes on sheet 8.
4. On sheet 10, provide a typical microwave dish to demonstrate compliance with 5-618(B)(3)(d).
5. State the proposed square footage and height of the equipment structure per 5-618(B)(3)(f).
6. Add a note that there will be no signal, unless otherwise required per 5-618(B)(3)(h).
7. Demonstrate that location on an existing structure greater than 40' is not feasible per 5-618(B)(4)(b).

A-09

**COMPLIANCE WITH SECTION 5-1100:**

8. Revise Survey Note 18 to include the required communication parking calculation of 1 space per 1.5 employees on a major shift, which results in one required parking space.

**COMPLIANCE WITH SECTION 5-1400:**

9. Revise the Landscape Waiver Request on sheet 11 to state that a modification of the landscaping requirement is being sought as part of this SPEX application, if this is the applicant's intent. Per Sections 5-1403(E), 5-1405(A), 5-1406(C), and 5-1406(E)(2), a Type III front yard buffer is required around the subject site. A modification of the required buffer may be granted by the Board of Supervisors as part of an approval of a special exception, per 5-1403(C). To seek relief under this section, a landscape modification must be part of the SPEX application, and must be advertised. Sheet 8 and 11 of the SPEX plat must show any areas to be within a "tree save" area.

If the applicant seeks to waive or modify the buffer administratively, a letter must be sent to the Zoning Administration demonstrating how one or more of the criteria found in Section 5-1409 applies to the site.

Finally, a modification can be granted as part of a site plan application, if the applicant can demonstrate that there is suitable existing vegetation which fulfills the landscaping requirements per 5-1403(B). Under this provision, where the existing vegetation does not meet or exceed the requirement, supplemental planting may be required. A letter from TreesPlease indicates that the existing vegetation meets or exceeds the landscape requirement. If the applicant seeks relief per 5-1403(B), the sheet 11 note must be revised to indicate that a Type III front yard landscape buffer is required around the site, unless a buffer waiver/modification is approved at the time of site plan. Again, this application should show any tree save area that will be used to support any modification or waiver.

**OTHER:**

10. On sheet 1 of 11, revise Note 2 as this use shall conform to all standards found in Section 5-618(B)(3) and (4), not Section 5-618(A).
11. Remove references to Catocin Election District in the sheet 1 title block, as the site subject to this SPEX is only located in the Dulles Election District. Also remove "THIS PROPERTY IS LOCATED IN THE DULLES AND CATOCTIN ELECTION DISTRICT" in the box under the title block, as well as all sheets of the SPEX plat.
12. Remove all listed "Current Zoning" districts in the Project Description box on sheet 1 and the survey notes on sheets 6 and 8. Instead, state that the subject SPEX area is zoned PD-H3. Revise "commercial toll road" as the Proposed Use on sheet 1, Project Description, and replace "Dulles Greenway" in Survey Note 3 on sheets 6 and 8, with "monopole". Provide the acreage of the subject site area in the Project Description box, on sheet 1, as well as Survey Note 4 on sheets 6 and 8.
13. On sheet 6 and 8, add a note that there are very steep and moderately steep slopes, but that neither is impacted by the proposal.
14. Add to Survey Note 8 on sheet 6 and 8 that there is no floodplain within the subject area.
15. On Sheet 8 of 11, revise the note in the second column as this is not a compound expansion and revise the note to reflect that the subject site is within the Dulles Election district.

**DEPARTMENT OF BUILDING AND DEVELOPMENT**

**COUNTY OF LOUDOUN**

**MEMORANDUM**

DATE: January 11, 2010

TO: Mike Elabarger, Project Manager, Department of Planning

FROM: Todd Taylor, Environmental Review Team

THROUGH: William Marsh, Environmental Review Team Leader

CC: Theresa Stein, Zoning Planner  
Dana Malone, Urban Forester  
Patrick Giglio, Community Planner, Department of Planning

SUBJECT: **SPEX-2009-0030 & CMPT-2009-0009**  
**CWS Exit 5 Claiborne Parkway**  
**(2nd Submission)**

The Environmental Review Team (ERT) has reviewed the revised application and offers the following comments.

1. In an electronic mail, dated January 6, 2010, the applicant states that they "agree to plant seedlings in the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management (SWM) pond, and existing tree stand, and will work with ERT to develop a planting plan that is sustainable". Staff appreciates this effort and believes that the planting will help recapture lost tree canopy, increase long-term screening of the proposed monopole, provide beautification along the Dulles Greenway, and reduce future maintenance costs associated with invasive plant removal. Staff recommends identifying the limits of the reforestation area on the special exception plat. The following condition language provides a means to achieve the reforestation recommendation:

*The applicant shall reforest the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the monopole compound, existing stormwater management pond, and existing tree stand, as shown on the special exception plat. Existing scattered Eastern red cedar trees may be preserved and incorporated into the reforestation area. A reforestation plan shall be submitted to the County for review and approval, prior to site plan approval. The applicant shall obtain necessary permission from the owner of the property to be planted. In the event the owner does not grant*

*permission, the applicant is not required to submit the reforestation plan or perform the planting.*

The recommendation is consistent with Forests, Trees and Vegetation Policy 7 which states that tree protection will be encouraged along roadways to allow trees to provide shading, reduce peak storm flows, and contribute to the enhancement of the green infrastructure [Revised General Plan (RGP), Page 5-32]. The recommendation is also consistent with the County's strategy to protect its existing green infrastructure elements and to recapture elements where possible [RGP, Page 6-8, Green Infrastructure Text]. The ERT and County Urban Forester are available to meet to discuss reforestation.

Please contact me if you need additional information or have questions.

**DEPARTMENT OF BUILDING AND DEVELOPMENT**

**COUNTY OF LOUDOUN**

**MEMORANDUM**

**DATE:** December 3, 2009

**TO:** Mike Elabarger, Project Manager, Department of Planning

**FROM:** Todd Taylor, Environmental Review Team

**THROUGH:** William Marsh, Environmental Review Team Leader

**CC:** Theresa Stein, Zoning Planner  
Dana Malone, Urban Forester  
Patrick Giglio, Community Planner, Department of Planning

**SUBJECT: SPEX-2009-0030 & CMPT-2009-0009**  
**CWS Exit 5 Claiborne Parkway**

The Environmental Review Team (ERT) reviewed the subject application during the November 30, 2009, ERT Meeting. Our comments pertaining to the current application are as follows:

1. To help recapture lost tree canopy, increase long-term screening of the proposed monopole, provide beautification along the Dulles Greenway, and reduce future maintenance costs associated with invasive plant removal, staff recommends that the applicant consider reforestation of the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management (SWM) pond, and existing tree stand. Staff estimates the plantable area to be approximately four acres and recommends a loblolly pine planting, using bare root seedlings to limit cost, which is estimated to be less than \$1,000. This recommendation is consistent with Forests, Trees and Vegetation Policy 7 which states that tree protection will be encouraged along roadways to allow trees to provide shading, reduce peak storm flows, and contribute to the enhancement of the green infrastructure [Revised General Plan (RGP), Page 5-32]. This recommendation is also consistent with the County's strategy to protect its existing green infrastructure elements and to recapture elements where possible [RGP, Page 6-8, Green Infrastructure Text]. The ERT and County Urban Forester are available to meet to discuss reforestation.

Please contact me if you need additional information or have questions.

A-13



LOUDOUN COUNTY, VIRGINIA  
Department of Fire, Rescue and Emergency Management

803 Sycolin Road, Suite 104 Leesburg, VA 20175  
Phone 703-777-0333 Fax 703-771-5359



## Memorandum

**To:** Mike Elabarger, Project Manager  
**From:** Maria Figueroa Taylor, Fire-Rescue Planner  
**Date:** December 15, 2009  
**Subject:** CWS Exit 5 – Claiborne Parkway  
SPEX 2008-0030



Thank you for the opportunity to review the above captioned application. The Fire and Rescue Planning Staff, in agreement with the Fire Marshal's Office, has no objection to the application as presented.

The Fire-Rescue GIS and Mapping coordinator offered the following information regarding estimated response times:

Project name	Moorefield Station 23 Travel Time
CWS Exit 5	3 minutes, 52 seconds

The Travel Times for each project were calculated using ArcGIS and Network Analyst extension to calculate the travel time in minutes. To get the total response time another two minutes were added to account for dispatching and turnout. This assumes that the station is staffed at the time of the call. If the station is unoccupied another one to three minutes should be added.

Project name	Moorefield Station 23 Response Times
CWS Exit 5	5 minutes, 52 seconds

If you have any questions or need additional information, please contact me at 703-777-0333.

c: Project file



## Loudoun County Health Department

P.O. Box 7000  
Leesburg VA 20177-7000



Environmental Health  
Phone: 703 / 777-0234  
Fax: 703 / 771-5023

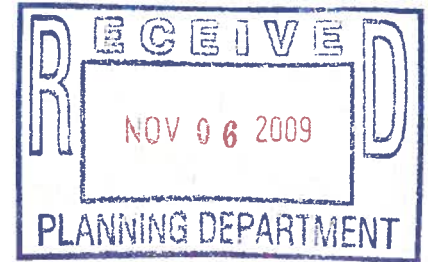
Community Health  
Phone: 703 / 777-0236  
Fax: 703 / 771-5393

5 November 2009

**MEMORANDUM TO:** Mike Elabarger, Project Manager  
Department of Planning, **MSC 62**

**FROM:**

Matthew D. Tolley  
Sr. Env. Health Specialist  
Division of Environmental Health, **MSC 68**



**SUBJECT:** **SPEX 2009-0030 & CMPT 2009-0009; CWS Exit 5**  
**Claiborne Parkway**  
**LCTM: N/A (PIN 234-37-8457)**

The Health Department recommends approval of this application. There are no wells, drainfields or other items of concern to the Health Department on this parcel. The plat reviewed was prepared by Entrex Communication Systems and was revised 30 October 2009.

Attachments Yes \_\_\_ No X

If further information or clarification on the above project is required, please contact Matt Tolley at 771-5248.

MDT/JEL/mt  
c:subdygd.ref





# COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.  
COMMISSIONER

## DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway  
Chantilly, VA 20151  
(703) 383-VDOT (8368)

January 19, 2010

Mr. Mike Elabarger  
County of Loudoun  
Department of Planning MSC#62  
1 Harrison Street, S.E.  
P.O. Box 7000  
Leesburg, Virginia 20177-7000

**RECEIVED**

JAN 21 2010

LOUDOUN COUNTY  
DEPARTMENT OF PLANNING

Re: CWS Exit 5 Site Claiborne Parkway  
Loudoun County Application Numbers SPEX 2009-0030 and CMPT 2009-0009

Dear Mr. Elabarger:

We have reviewed the above revised application as requested in your December 28, 2009 transmittal. Our November 25, 2009 comments have been addressed. Therefore, we have no objection to approval of this application.

If you have any questions, please call me at (703) 383-2424.

Sincerely,

Thomas B. VanPoole, P.E.  
Senior Transportation Engineer



# COMMONWEALTH of VIRGINIA

DAVID S. EKERN, P.E.  
COMMISSIONER

## DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway  
Chantilly, VA 20151  
(703) 383-VDOT (8368)

November 25, 2009

Mr. Mike Elabarger  
County of Loudoun  
Department of Planning MSC#62  
1 Harrison Street, S.E.  
P.O. Box 7000  
Leesburg, Virginia 20177-7000



Re: CWS Exit 5 Site Claiborne Parkway  
Loudoun County Application Number SPEX 2009-0030 and CMPT 2009-0009

Dear Mr. Elabarger:

We have reviewed the above application as requested in your November 4, 2009 transmittal. We offer the following comments:

1. The driveway should be perpendicular to the ramp.
2. The entrance should conform to VDOT standard PE-1.
3. The entrance should be paved for at least 25' from the edge of the ramp pavement.

If you have any questions, please call me at (703) 383-2424.

Sincerely,

Thomas B. VanPoole, P.E.  
Senior Transportation Engineer

**County of Loudoun**  
**Office of Transportation Services**  
**MEMORANDUM**

**DATE:** February 18, 2010

**TO:** Mike Elabarger, Project Manager  
Department of Planning

**FROM:** Marc Lewis-DeGrace, Transportation Planner

**SUBJECT:** **SPEX 2009-0030 & CMPT 2009-0009—Community Wireless Structures (CWS) Exit 5 Claiborne Parkway**  
**Second Referral Revised**



**Background**

This referral updates the status of issues identified in the first OTS referral on these applications (dated December 18, 2009). These Special Exception (SPEX) and Commission Permit (CMPT) applications seek approval to construct a 150-foot monopole with five-foot lightning rod and ground equipment within the southeast quadrant of the Dulles Greenway (Route 267)/Claiborne Parkway (Route 901) interchange (Exit 5). Access to the site is via a proposed 12-foot gravel access driveway from the eastbound on-ramp to the Dulles Greenway.

This update is based on review of materials received from the Department of Planning on January 26, 2010, namely (1) a letter responding to first referral comments, dated January 13, 2010 prepared by the Applicant, (2) a revised Statement of Justification, dated January 15, 2010 prepared by the Applicant and (3) a special exception plat revised through January 15, 2010 prepared by Entrex Communication Services, Inc.

**Status of Transportation Issues/Comments**

Staff comments from the first OTS referral as well as the Applicant's responses (quoted directly from its January 13, 2010 response letter) and current issue status, are provided below.

1. Initial Staff Comment (1<sup>st</sup> Referral): The provided traffic impact documents state that the proposed monopole will have a maximum of four (4) carriers. The provided plat indicates space for up to seven (7) carriers. For consistency, the Applicant should confirm the maximum number of carriers that will utilize this structure.

A-18

*Applicant's Response (January 13, 2010): The monopole will support a maximum of seven (7) carriers. The traffic impact letter was incorrect and will be revised to say that the monopole, when fully leased, would support seven (7) carriers.*

**Issue Status: Issue resolved.**

2. The proposed use will not generate a significant amount of traffic and thus road improvements are not requested from this Applicant. However, it is recommended that the Applicant coordinate with the owners of the Dulles Greenway (TRIP II) to ensure that the proposed monopole and equipment compound will not interfere with any future expansion of the Dulles Greenway.

*Applicant's Response (January 13, 2010): CWS has a ground lease with TRIP II defining the compound area of the telecommunications site. This has been coordinated with the civil engineers and does not conflict with any planned future expansion of the Dulles Greenway.*

**Issue Status: Issue resolved.**

3. The Applicant should confirm that the proposed entrance meets applicable commercial entrance requirements.

*Applicant's Response (January 13, 2010): Complied, please see Sheet 8, Z-5 and sheet 9, Z-6.*

**Issue Status: Issue resolved.**

### **Conclusion**

**OTS has no objection to the approval of these applications.**

cc: Andrew Beacher, Assistant Director, OTS  
Lou Mosurak, Senior Transportation Coordinator, OTS

**County of Loudoun**  
**Office of Transportation Services**

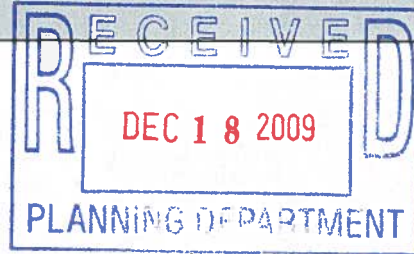
**MEMORANDUM**

**DATE:** December 18, 2009

**TO:** Mike Elabarger, Project Manager  
Department of Planning

**FROM:** Marc Lewis-DeGrace, Transportation Planner *MLDG*

**SUBJECT:** **SPEX 2009-0030 & CMPT 2009-0009—Community Wireless Structures (CWS) Exit 5 Claiborne Parkway First Referral**



**Background**

These Special Exception (SPEX) and Commission Permit (CMPT) applications seek approval to construct a 150-foot monopole with five-foot lightning rod and ground equipment within the southeast quadrant of the Dulles Greenway (Route 267)/Claiborne Parkway (Route 901) interchange (Exit 5). Access to the site is via a proposed 12-foot gravel access driveway from the eastbound on-ramp to the Dulles Greenway. A vicinity map is provided as *Attachment 1*.

In its consideration of these applications, the Office of Transportation Services (OTS) reviewed materials received from the Department of Planning on November 3, 2009, including (1) a statement of justification prepared by the Applicant, and (2) a special exception plat (plan set) prepared by Entrex Communication Services, Inc., revised through October 30, 2009.

**Existing, Planned and Programmed Transportation Facilities**

The site is located within the Suburban Policy Area (Ashburn Community). Major roadways serving the site are described below. OTS review of existing and planned transportation facilities is based on the 2001 Revised Countywide Transportation Plan (2001 Revised CTP) and the 2003 Bicycle & Pedestrian Mobility Master Plan (2003 Bike & Ped Plan).

**Claiborne Parkway (Route 901)** is classified by the 2001 Revised CTP as a controlled access major collector. A grade-separated interchange is in place under the Dulles Greenway. In the vicinity of this site, Claiborne Parkway has been constructed to a four-lane divided (U4M) condition, though the roadway ultimately is planned to be widened to a six-lane divided (U6M) facility. The intersection with the eastbound Greenway on-ramp is currently unsignalized. The 2003 Bike & Ped Plan classifies Claiborne Parkway as a "baseline connecting roadway" along which bicycle and pedestrian facilities are envisioned. Currently,

there is a multiuse trail along the west side Claiborne Parkway north and south of the Dulles Greenway.

**Dulles Greenway (Route 267)** is a private toll road classified by the **2001 Revised CTP** as a limited access principal arterial. It is currently constructed to its ultimate six-lane divided (R6M) condition, with full-movement interchanges at a number of locations, including Claiborne Parkway (Exit 5). It is noted that per the draft 2009 CTP currently under review, the Dulles Greenway is planned to be widened to an eight-lane divided (U8M) facility.

### **Trip Generation by Proposed Uses**

Telecommunications facilities such as the proposed monopole and support facilities typically generate a total of two (2) vehicle trips per carrier (one (1) in, one (1) out) per month for maintenance purposes. Based on the submitted traffic study guidelines, a total of four (4) carriers would have a presence at this facility for a total of eight (8) vehicle trips per month. The provided plat indicates space will be available for up to seven (7) carriers on the monopole for a total of 14 vehicle trips per month.

### **Transportation Comments**

1. The provided traffic impact documents state that the proposed monopole will have a maximum of four (4) carriers. The provided plat indicates space for up to seven (7) carriers. For consistency, the Applicant should confirm the maximum number of carriers that will utilize this structure.
2. The proposed use will not generate a significant amount of traffic and thus road improvements are not requested from this Applicant. However, it is recommended that the Applicant coordinate with the owners of the Dulles Greenway (TRIP II) to ensure that the proposed monopole and equipment compound will not interfere with any future expansion of the Dulles Greenway.
3. The Applicant should confirm that the proposed entrance meets applicable commercial entrance requirements.

### **Conclusion**

**OTS will offer a recommendation once it has reviewed the Applicant's responses to the comments identified in this referral.**

### **ATTACHMENT**

1. Site Vicinity Map

cc: Andrew Beacher, Assistant Director, OTS  
Lou Mosurak, Senior Transportation Coordinator, OTS



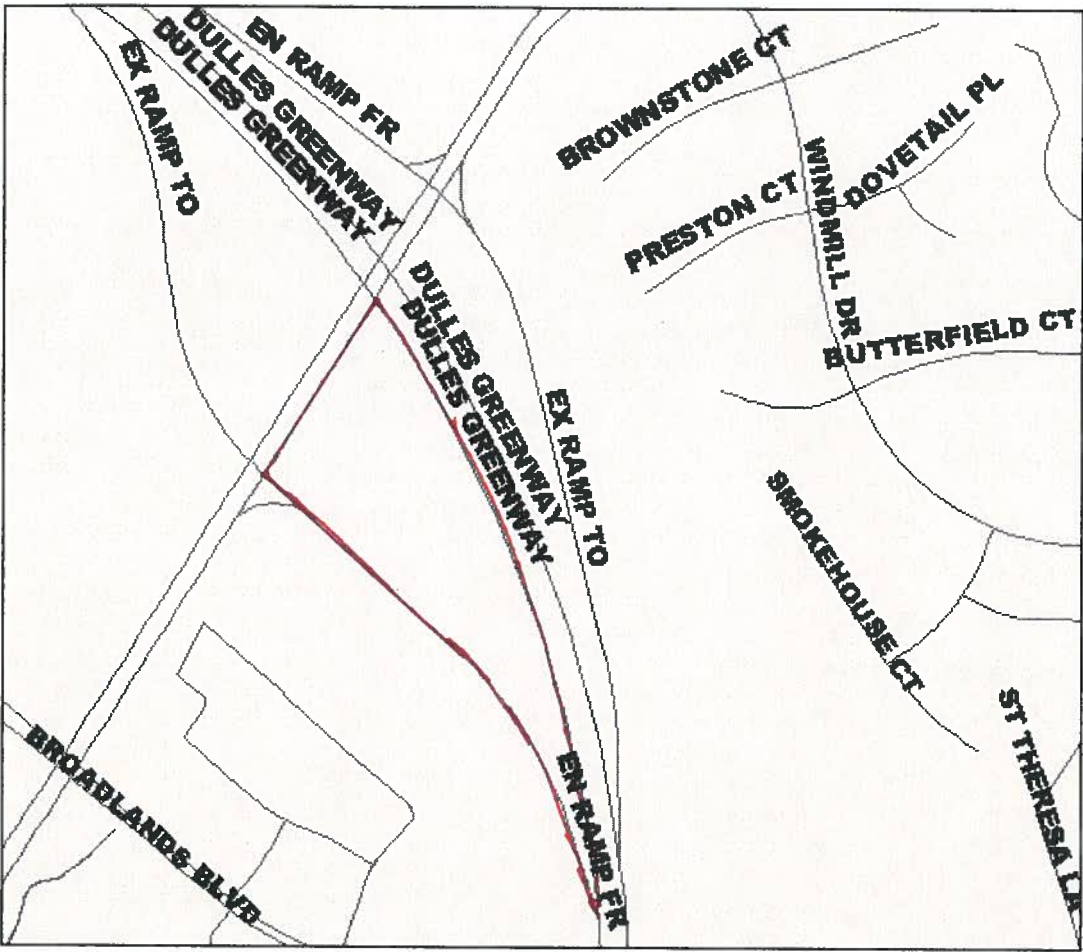
Loudoun County Mapping System



7,060,598



7,057,848



11,763,556      Map Width=3,144 feet      11,766,700  
Created on 12/1/2009 1:58:54 PM

ATTACHMENT 1

A-22



## **STATEMENT OF JUSTIFICATION**

**SPEX 2009-0030 / CMPT 2009-0009**

### **EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY**

**IN SUPPORT OF THE APPLICATION FOR A SPECIAL EXCEPTION AND COMMISSION PERMIT  
TO PERMIT COMMUNITY WIRELESS STRUCTURES, LLC  
TO CONSTRUCT A TELECOMMUNICATIONS FACILITY AND ANCILLARY EQUIPMENT IN  
LOUDOUN COUNTY, VIRGINIA**

***REVISED – FEBRUARY 18, 2010***

CWS requests review and approval of a proposed one hundred fifty (150) foot monopole telecommunications facility (155' with lightning rod) to be located in a strand of trees between Route 267 and the eastbound ramp, more commonly known as Exit 5 Broadland. The proposed monopole will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal. The proposed monopole is compatible with development in the vicinity. Since the proposed location is adjacent to a highway, the structure will be viewed primarily by those traveling north and south on Route 267 (Dulles Greenway). The nearby thoroughfare is lined with utility and light poles, so the monopole blends with the other poles in the area. The proposed monopole is in the vicinity of power poles running along Route 267. The design of the proposed monopole blends with the nearby utility and light poles.

The purpose of the proposed telecommunications facility is to provide needed wireless communications coverage enhancements for the citizens, businesses and visitors of Loudoun County traveling through, working and living in the surrounding area for essential, non-essential and emergency communications.

The proposed telecommunications facility will include proposed antennas and related cables. Additionally, the proposed telecommunications facility will include equipment pads for T-Mobile and Clearwire with room for five (5) additional wireless providers. The proposed telecommunications facility will be located within a 6000 square foot board on board over chain link fenced compound. The total Special Exception Area, as indicated on the Special Exception Plat submitted with this application is 16,461 square feet. The proposed telecommunications facility will function as a base transmission station for wireless telecommunications networks. The proposed telecommunications facility is subject to the standards of Section 5-618. The proposed telecommunications facility will comply with the standards set forth in Section 5-618 as well as the general special exception standards of Section 6-1310. The proposed 150' monopole (155' with lightning rod and appurtenances) will accommodate T-Mobile at a proposed mounting height of 150' with twelve (12) panel antennas. Each panel antenna is 59" high, 11.9" wide and 6.3" deep. Clearwire will install at a proposed mounting height of 140' with three (3) panel antennas. Each panel antenna is 42" high, 12" wide and 4.5" deep. Additionally, Clearwire will install three (3) microwave dishes not to exceed 2' in diameter. There will be space for up to five (5) additional wireless providers on the proposed structure and inside of the proposed compound area.

In accordance with the requirements of the Zoning Ordinance of Loudoun County, VA., Community Wireless Structures, LLC ("CWS" or "Applicant") hereby submits this Statement of Justification in support of its request for a Special Exception and Commission Permit to allow for the construction of a one hundred fifty (150) foot monopole telecommunications facility (155' with lightning rod) and ancillary equipment on the property (the "Property") located near the Route 267 eastbound ramp of Exit 5. The Property is owned by the Toll Road Investors Partnership II, LP.

## NATURE OF REQUEST

CWS is a wireless infrastructure developer serving the wireless carriers in the Washington, D.C., metropolitan area, including Loudoun County. Section 4-100, 5-618(B)(2)(d) and Section 5-618(B)(3) of the Loudoun County Zoning Ordinance, effective June 16, 1993, as amended (the "Revised 1993 Ordinance"), and pursuant to Section 15.2-2232 of the Code of Virginia, as amended, CWS, as lessee, applies for a Special Exception to construct a one hundred fifty (150) foot (155' with lightning rod) foot monopole communications facility with a sixty (60) foot by one hundred (100) foot compound enclosed with an eight (8) foot board on board over chain link fence on the Property located at Exit 5 along the Dulles Greenway. The Exit 5 facility area will be an approximately six thousand (6,000) square foot area on the property identified in the County land records as PIN: 234-37-8457 (the "Site") near the intersection of Claiborne Parkway and the Dulles Greenway. The total Special Exception Area, as indicated on the Special Exception Plat submitted with this application is 16,461 square feet.

The proposed facilities will be in conformance with Section 5-618(B) of the Zoning Ordinance.

The setbacks from the property lines are approximately: 382.4 feet to the North East, 200.1 feet to the South West, 681.1 feet to the North West, and 946.9 feet to the South East. These setbacks exceed the requirements set forth by section 5-618(B)(3)(e).

## ZONING CLASSIFICATION OF PROPERTY

Collectively, the entire subject property is zoned AR-1, JLMA-20, PDH-3, PDH-4, PD-IP, PD-OP, PDTRC, R-1, R-16, TR-10 and Towns zoning districts. The zoning in the area of the parcel specific to the telecommunications facility is zoned PDH3. The parcels adjacent to this facility are zoned PDH3 (south, east & west of Site), PDH4 (north of the Site).

In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate "telecommunication facilities" within the right of way of a private toll road.

## REASON FOR REQUEST

The proposed facility is necessary to cover gaps in service in the vicinity of and around portions of Route 267 and the general area surrounding the Property. As more specifically shown, on the propagation maps submitted with this application, the wireless service providers using this communications facility need additional coverage in and around the immediate area, CWS respectfully requests that this proposal be approved.

Applicant considered the following alternate sites; for the reasons noted below, none of the alternate sites is preferable to the Property. There are three structures taller than 40 feet in height within a one mile radius of the site and they are listed below, however, none of these sites is preferable to the Property.

	<u>Site</u>	<u>Address</u>	<u>Zoning</u>
a.	Willow Creek Farm There were no existing structures 40 feet or taller on this property.	42920 Broadlands Blvd.	PDH3
b.	Hillside Elementary School There were no existing structures 40 feet or taller on this property.	43000 Ellzey Dr	PDH3
c.	Loudoun County Pub Schools Headquarters	21000 Education Court	PDH3

Structure is taller than 40 feet, but Owner does not currently lease or license space to telecommunications carriers.

- d. Church of Jesus Christ of Latter Day Saints      21015 Claiborne Parkway      PDH4  
Structure is taller than 40 feet, but Owner does not currently lease or license space to telecommunications carriers.
- e. Our Savior's Way Evangelical Lutheran Church      43121 Waxpool Road      PDH3  
Structure is taller than 40 feet, CMPT/SPEX application process for T-Mobile USA to replace the church steeple for the placement of a telecommunications facility. The final height of the steeple will be 70 feet. Due to the nature of this build, the only carrier that can be accommodated is T-Mobile. This location will not satisfy the coverage requirements of the monopole proposed at Exit 5, Claiborne Parkway.

The area in the vicinity of the site consists of predominately commercial and planned residential development uses. Applicant has located on the proposed Property which has sufficient space to accommodate a communications facility and the related ancillary proposed equipment compound. The proposed communications facility will be located in a strand of trees between Route 267 and the eastbound ramp, and will be screened by the existing trees and vegetation. The monopole will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal.

#### CONSISTENCY WITH THE GOALS AND POLICIES OF THE COMPREHENSIVE PLAN

##### **Relationship to the Comprehensive Plan and the Zoning Ordinance**

The Comprehensive Plan. The Strategic Land Use Plan for Telecommunications Facilities was adopted as part of Loudoun County's Comprehensive Plan on November 6, 1996. The purpose of this policy document includes "...ensuring appropriate siting and design, and mitigating impacts of telecommunications facilities". The following is a discussion of the consistency of the proposed expanded monopole facilities with the goals and policies outlined in the 1991 General Plan.

##### Siting

The proposed telecommunications facility will have no impact on air quality, water quality, radiation exposure, light pollution, noise pollution, traffic congestion or circulation. The proposed telecommunications facility will be consistent with all applicable requirements, including building and fire code. The proposed telecommunications facility will not present safety or fire hazards. The proposed telecommunications facility is an unmanned facility that will not produce material noise, traffic, waste, or otherwise negatively impact the surrounding uses. The site will be visited approximately once per month by a technician for regular maintenance. There will be no new or additional glare or light generated by the proposed use.

The antennas emit no noise, light, or odors. The proposed telecommunications facility will have no discernable traffic impact. All carriers, and future carriers, co-locating on the monopole are licensed by the FCC, and each operates its equipment in full compliance with FCC rules and regulations.

##### Design

The attached Special Exception Plat shows the design of the communications facility and its relation to the existing structures on the Property. The communications facility will be one hundred fifty (150) foot

in height (155' foot with lightning rod). It is placed between the eastbound access ramp and Route 267 in a stand of trees. Applicant proposes a sixty (60) foot by one hundred (100) foot fenced compound area. The proposed compound area will be surrounded by an eight (8) foot board on board over chain link security fence as shown on the Special Exception Plat. There will be additional utility equipment placed within the compound area to provide power and telecommunications services to the communications facility.

The Zoning Ordinance. Telecommunications monopoles shall be permissible subject to approval of a special exception and subject to the performance standards listed in Sections 5-618(B)(3) and 5-618(B)(4), 5-618(B)(2)(d); In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate "telecommunication facilities" within the right of way of a private toll road.

***CWS understands that the requested facility is subject to approval of a special exception and subject to the performance standards cited above.***

- Applicant has designed the proposed telecommunications facility to be at the lowest height possible while still providing coverage to the desired coverage area. Given the location within the existing treed area, the proposed telecommunications facility will create minimal visual impact as is illustrated in the photos simulations submitted as part of this application.
- The proposed monopole, panel antennas, dishes, and related equipment cabinets will all be within the size and height limitations specified in the Zoning Ordinance. The antennas will be painted to match the color of the pole. The equipment structures and cabinets will be finished in neutral, earth-tone, non-reflective materials, and will be completely screened by a board on board over chain like security fence and vegetative buffer. There will be no commercial advertising on the proposed Site.
- There will be no signals or lights or illumination on any antennas, unless required by state or federal authorities or the County.
- The proposed facility will be constructed to accommodate up to seven (7) wireless service providers.
- The Site is not located within a County-designated historic district.

CWS believes that the preceding responses demonstrate that the proposed facility is in conformance with the stated goals and policies of the Comprehensive Plan and that each of the above criteria for evaluating special uses has been met.

## **Conclusion**

The proposal described above is consistent with and furthers the policies and standards for the placement of commercial public telecommunications facilities in each of the applicable zoning districts as set forth in the Loudoun County Comprehensive Plan and Zoning Ordinance. The Applicant's proposed facility will comply with all applicable development and building codes and the proposed uses will conform to all ordinances, regulations, adopted standards, and conditions. Accordingly, CWS respectfully requests approval of this Application for Special Exception.

## CONSIDERATIONS OF SECTION 5-618(B)(3) MONOPOLES

### GENERAL PERFORMANCE CRITERIA

**SPEX 2009-0030 / CMPT 2009-0009**

**EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY**

#### **GENERAL PERFORMANCE CRITERIA CONSIDERATIONS:**

**Section 5-618(b)(3): Monopoles, General Performance Criteria. All telecommunications monopoles, whether permitted by right or permissible with the approval of a special exception application, shall be subject to the following criteria:**

**(a) The proposed telecommunications monopole shall be compatible with development in the vicinity with regards to the setting, color, lighting, topography, materials and architecture. In addition, the facility shall be located in the interior of the property and areas of existing vegetation, if applicable, shall be used to screen the facility.**

The area in the vicinity of the site consists of predominately commercial and planned residential development uses. Applicant has located the Property which has sufficient space to place a communications facility and equipment compound. The communications facility will be located in a stand of trees between Route 267 and the eastbound ramp, so the equipment facility will be screened by existing trees. The monopole will be surrounded by an 8 foot board on board over chain link security fence as shown on the Special Exception Plat. The visual impact from the communications facility will be minimal. The proposed monopole is compatible with development in the vicinity. Since the proposed location is adjacent to a highway, the structure will be viewed primarily by those traveling north and south on Route 267 (Dulles Greenway). The nearby thoroughfare is lined with utility and light poles, so the monopole blends with the other poles in the area. The proposed monopole is in the vicinity of power poles running along Route 267. The design of the proposed monopole blends with the nearby utility and light poles.

**(b) New telecommunications monopoles shall be designed to accommodate at least three (3) providers, unless:**

- (i) Doing so would create an unnecessary visual impact on the surrounding area; or**
- (ii) No additional need is anticipated for any other potential user in the vicinity; or**
- (iii) There is some valid economic, technological, or physical justification as to why co-location is not possible.**

**The applicant shall identify the conditions under which future co-location is not possible.**

The proposed 150' monopole (155' with lightning rod and appurtenances) will accommodate T-Mobile at a proposed mounting height of 150' with twelve (12) panel antennas. Each panel antenna is 59" high, 11.9" wide and 6.3" deep. Clearwire will install at a proposed mounting height of 140' with three (3) panel antennas. Each panel antenna is 42" high, 12" wide and 4.5" deep. Additionally, Clearwire will install three (3) microwave dishes not to exceed 2' in diameter.

A proposed 100' x 60' compound will be provided at the base of the monopole, to be surrounded by an eight (8) foot tall board on board over chain like fence. T-Mobile will install a 10' x 20' concrete pad within the enclosed compound, with three (3) equipment cabinets installed on the concrete pad. Each equipment cabinet

will measure 63.5" tall by 31.25" wide by 37" deep. Clearwire will install a 7' x 7' concrete pad within the enclosed compound with two (2) equipment cabinets installed on the concrete pad.

The proposed facility will be designed to provide for at least five (5) additional wireless providers. The proposed facility will be unmanned and will operate around the clock, 365 days per year. Routine maintenance will occur once or twice per month, performed by a service technician driving a standard sized vehicle.

Applicant will market remaining mounting heights to all interested wireless providers. All interested wireless providers will install under the conditions set forth by the granting of the Special Exception and the documented drawings submitted as part of this application.

**(c) The height of such monopole, including antennas, shall not exceed 199 feet, as measured from the natural ground elevation.**

The proposed monopole will be 150' (155' with lightning rod and appurtenances).

**(d) Satellite and microwave dishes attached to monopoles shall not exceed two (2) feet in diameter.**

Clearwire will install at a mounting height of 140' with three (3) microwave dishes not to exceed 2' in diameter.

**(e) Except as provided in Section 5-618(B)(3)(o), and Section 5-618(B)(4)(d), telecommunications monopoles shall not be located any closer than one (1) foot for every five (5) feet in height to any property line. Structures and building may be constructed within the setback areas of the monopole, provided other zoning standards are met.**

The compound facility and fence are setback from the nearest property line by at least twenty eight feet (28') in conformance with the zoning ordinance requirements. To the North East 360'; to the South West 129', to the North West 681', and to the South East 1085'.

**(f) The related unmanned structure(s) shall not contain more than 500 square feet of total gross floor area per telecommunications provider on each site. Structures shall not exceed 12 feet in height.**

Each equipment shelter will have no more than 500 square feet of gross floor area and will not exceed 12 feet in height.

T-Mobile will install a 10' x 20' concrete pad within the enclosed compound, with three (3) equipment cabinets installed on the concrete pad. Each equipment cabinet will measure 63.5" tall by 31.25" wide by 37" deep.

Clearwire will install a 7' x 7' concrete pad within the enclosed compound with two (2) equipment cabinets installed on the concrete pad. Each equipment cabinet will measure a maximum of 50" tall by 20" wide by 22" deep.

Space for additional five (5) wireless providers will be provided inside of proposed compound area.

**(g) Unless otherwise required by the Federal Communications Commission or the Federal Aviation Administration, monopoles shall blend with the background.**

The design of the proposed monopole blends with the nearby utility and light poles. The proposed monopole, panel antennas, dishes, and related equipment cabinets will all be within the size and height limitations specified in the ordinance. The antennas will be painted to match the color of the pole. The equipment structures and cabinets will be finished in neutral, earth-tone, non-reflective materials, and they will be completely screened by a fence and vegetative buffer. There will be no commercial advertising on the Site.

**(h) No signals or lights or illumination shall be permitted on the monopole, unless required by the Federal Communications Commission, the Federal Aviation Administration, State or Federal Authorities, or the County.**

Lighting is not required by the Federal Communication Commission (FCC), the Federal Aviation Administration (FAA), State or Federal authorities, or the County. No signals, lights, or illumination shall be located on the existing structure.

**(i) No commercial advertising or signs shall be allowed on a monopole.**

No commercial advertising or signs shall be located on the existing monopole.

**(j) A commission permit shall be required.**

A commission permit has been submitted to be processed concurrently with this Special Exception Application.

**(k) No monopole shall be located within a County designated historic district.**

According to the Section 106 report, dated August 23, 2009, and attached as part of this submittal, no properties are listed in the historic district. Additionally, no properties will be affected by the proposed installation.

**(l) No monopole shall be located within a PD-H or PD-RV zoning district except as provided in Section 5-618(B)(1)(a) and Section 5-618(B)(2)(d).**

The subject parcel is multi-zoned, the portion of the subject parcel in the vicinity of the proposed site is zoned PDH3. In accordance with Section 5-618(B)(2)(d), a Special Exception from the Board of Supervisors is required in to order to construct and operate "telecommunication facilities" within the right of way of a private toll road.

**(m) All unused equipment and facilities from a commercial public telecommunications site shall be removed within 90 days of cessation of commercial public telecommunication use and shall be restored as closely as possible to its original location.**

Applicant will remove the monopole and equipment and restore the site as closely as possible to its original condition within 90 days of cessation of its use as a telecommunications facility.

**(n) Applicants for any public telecommunications facility shall demonstrate that they have complied with applicable regulations of the FCC and FAA. A finding from the FAA that the proposed facility is not a hazard or obstruction to aviation is necessary prior to issuance of a zoning permit. If a proposed telecommunications facility is higher than 199 feet or within five (5) miles of the property boundary of either Dulles or Leesburg Airports, the applicant shall provide verification that: 1) the appropriate airport authority (Metropolitan Washington Airports Authority or the Town of Leesburg) has been notified in writing; and 2) the FAA has determined that the proposed facility is neither a hazard nor an obstruction to aviation.**

The proposed monopole will be in compliance with all regulations regarding aviation safety. Attached in the original submittal, is an FAA determination letter for the proposed structure, dated May 11, 2009. The letter states that an FAA determination of no aviation hazard has been made.



**(o) When locating on a Loudoun County or Loudoun County Sanitation Authority site or fire and/or rescue company site: 1) the telecommunications equipment shall not interfere with the existing telecommunications equipment of the primary use; and 2) the setback provisions of Section 5-618(B)(3)(e) shall not apply. In addition, the landscaping/buffering provisions of the Ordinance may be reduced or waived if the site has been developed in accordance with Section 5-1409(G).**

Not applicable.

**(p) Applicants proposing a new telecommunications monopole within one (1) mile of a County designated historic district or a Virginia Byway shall submit a minimum of three (3) visual simulations and written justification as to why the monopole could not be sited elsewhere. This requirement shall also be applied if a telecommunications monopole is proposed on a property listed on the National Register of Historic Places.**

Not located within one (1) mile of County Historic District or Virginia Byway.

**(q) Telecommunications monopoles shall not be located along ridge lines, but downslope from the top of ridge lines, to protect views of the Catocin, Bull Run, Hogback, Short Hill, and Blue Ridge Mountains.**

Please refer to the Special Exception Plat submitted as part of this application. The proposed monopole will not be located along any ridge lines.

**(r) Applicants shall submit documentation, in written and graphic form, regarding the service area to be provided by the proposed telecommunications monopole.**

The proposed facility is necessary to cover gaps in service in the vicinity of and around portions of Route 267 and the general area surrounding the Property. As more specifically shown on the propagation maps submitted as part of this application, the wireless providers proposing to use this communications facility need additional coverage in this area.

OTHER CONSIDERATIONS RELEVANT TO THE PROPOSED FACILITY AND THE REQUESTED  
SPECIAL EXCEPTION

Consideration of Section 6-1310: Special Exception, Issues for Consideration  
**EXIT 5: BROADLAND @ CLAIBORNE PKWY / DULLES GREENWAY**

- A. The proposed use is in keeping with the County's Comprehensive Plan. Applicant has identified 3 structures that exceed 40 feet in height within a one mile radius from the proposed project, as discussed above. Two of those structures do not currently lease or license space to telecommunications carriers for the purpose of operating wireless broadband telecommunications sites. The third structure is being pursued under the CMPT/SPEX process as a potential telecommunications facility for one carrier only. This Application is for a monopole structure which is the structure type preferred by the County. The monopole will only be lit if mandated by the FAA or other governmental authorities having jurisdiction. The proposed facility adequately provides for safety from fire hazards and has effective measures of fire control for unmanned telecommunication facilities.
- B. There would be no noise emitted from the facility making no impact on the noise level of the surrounding facility.
- C. The monopole, antennae and equipment would not generate any light.
- D. The proposed use does not conflict with the existing adjacent uses as the parcels directly adjacent to the proposed site are being used primarily for commercial/industrial purposes and some residential. The proposed installation would provide private and public emergency wireless telephone coverage.
- E. The existing mature woods in the proposed location exceed the intent of the required Type 3 or 4 landscape buffer the Ordinance requires.
- F. The proposed monopole would cause no loss of topography or physical, natural, scenic, archaeological or historic feature of significance.
- G. The proposed monopole would not affect existing animal habitat, vegetation, water quality or air quality.
- H. The proposed monopole would provide benefit to, contribute to, and promote the welfare and convenience of the public by significantly improving wireless communications. The proposed monopole would enhance police, fire, and rescue services by providing additional wireless telephone and broadband coverage to the surrounding area. The monopole would also benefit the public through enhanced business and personal communications.
- I. The amount of traffic generated by the monopole is minimal and thus the existing infrastructure will adequately serve the monopole with no affect on safety to the community.
- J. The facility would be designed to meet all local and state building codes.
- K. The facility would only require electric power and telephone service, which is already available at site.
- L. The facility would have no impact on groundwater.
- M. The site would be designed to comply with the structural capacity of the soils.
- N. The proposed use would have no impact on orderly and safe road development and transportation as the site is located sufficiently distant from any existing or planned road expansion.
- O. The project would facilitate enhanced personal and business communications making Loudoun County a more desirable location to work and live.
- P. The site is designed to accommodate future wireless communication technology needs so as to support changes in agriculture, industry and business.
- Q. There is adequate off site infrastructure for the electric and land-line telephone needs of the project.
- R. The site will generate no odors.
- S. Due to the location of the site, the construction of the project will not significantly increase the affect on residents and no schools will be impacted.

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## COMMUNITY WIRELESS STRUCTURES

January 13, 2010

Mike Elabarger, Project Manager, Planning  
Land Use Review, County of Loudon  
1 Harrison Street SE  
Leesburg, VA 20175

Re: SPEX 2009-0030 and CMPT 2009-0009 Exit 5: Claiborne Parkway – Dulles Greenway

Dear Mike:

CWS, LLC (CWS) acknowledges receipt of the Zoning Administration, the Virginia Department of Transportation, the Office of Transportation Services, the Community Planning and Environmental Review Team referral comments in the referenced land use application. This letter constitutes the response of CWS as applicant to those comments received in connection with this application.

Our responses are as follows:

**ZONING ADMINISTRATION REFERRAL** November 30, 2009 (Theresa M. Stein, Planner)

COMPLIANCE WITH SECTION 5-618(B)(3) and (4):

Staff Comment #1: Add to the height requirement box on sheet 8 the height of the lightning rod.

**Response: Complied, please see Sheet 8, Z-5.**

Staff Comment #2: On sheet 8, state the number of providers to be accommodated per 5-618(B)(3)(b).

**Response: Complied, please see Sheet 8, Z-5.**

Staff Comment #3: Add the required setback per Section 5-618(B)(3)(c) to the setback boxes on sheet 8.

**Response: Complied, please see Sheet 8, Z-5.**

Staff Comment #4: On sheet 10, provide a typical microwave dish to demonstrate compliance with 5-618(B)(3)(d).

**Response: Complied, please see Sheet 10, Z-7.**

Staff Comment #5: State the proposed square footage and height of the equipment structure per 5-618(B)(3)(f).

**Response: Complied, please see Sheet 10, Z-7..**

2800 SHIRLINGTON ROAD, SUITE 960 · ARLINGTON, VIRGINIA · 22206  
PHONE: 703-845-1971 · FAX: 703-845-1953

January 13, 2010

Staff Comment #6: Add a note that there will be no signal, unless otherwise required per 5-618(B)(3)(h).

**Response: Complied, please see Sheet 8, Z-5.**

Staff Comment #7: Demonstrate that location on an existing structure greater than 40' is not feasible per 5-618(B)(4)(b).

**Response: To be supplied by others.**

**COMPLIANCE WITH SECTION 5-1100:**

Staff Comment #8: Revise Survey Note #15 to include the required communication parking calculation of 1 space per 1.5 employees on a major shift, which results in one required parking space.

**Response: Complied, please see Sheet 6, Z-3.**

**COMPLIANCE WITH SECTION 5-1400:**

Staff Comment #9: Revise the Landscape Waiver Request on sheet 11 to state that a modification of the landscaping requirement is being sought as part of this SPEX application, if this is the applicant's intent. Per Sections 5-1403(E), 5-1405(A), 5-1406(C), and 5-1406(E)(2), a Type III front yard buffer is required around the subject site. A modification of the required buffer may be granted by the Board of Supervisors as part of an approval of a special exception, per 5-1403(C). To seek relief under this section, a landscape modification must be part of the SPEX application, and must be advertised. Sheet 8 and 11 of the SPEX plat must show any areas to be within a "tree save" area.

If the applicant seeks to waive or modify the buffer administratively, a letter must be sent to the Zoning Administration demonstrating how one or more of the criteria found in Section 5-1409 applies to the site.

Finally, a modification can be granted as part of a site plan application, if the applicant can demonstrate that there is suitable existing vegetation which fulfills the landscaping requirements per 5-1403(B). Under this provision, where the existing vegetation does not meet or exceed the requirement, supplemental planting may be required. A letter from TreesPlease indicates that the existing vegetation meets or exceeds the landscape requirement. If the applicant seeks relief per 5-1403(B), the sheet 11 note must be revised to indicate that a Type III front yard landscape buffer is required around the site, unless a buffer waiver/modification is approved at the time of site plan. Again, this application should show any tree save area that will be used to support any modification or waiver.

**Response: Note on Sheet 11, Z-8, landscape plan has been revised.**

**OTHER:**

Staff Comment #10: On sheet 1 of 11, revise Note 2 as this use shall conform to all standards found in Section 5-618(B)(3) and (4), not Section 5-618(A).

**Response: Complied, please see Sheet 1, T-1.**

Staff Comment #11: Remove references to Catoctin Election District in the sheet 1 title block, as the site subject to this SPEX is only located in the Dulles Election District. Also remove "THIS PROPERTY IS LOCATED IN THE DULLES AND CATOCTIN ELECTION DISTRICT" in the box under the title block, as well as all sheets of the SPEX plat.

A-34

January 13, 2010

***Response: Complied.***

Staff Comment #12: Remove all listed "Current Zoning" districts in the Project Description box on sheet 1 and the survey notes on sheets 6 and 8. Instead, state that the subject SPEX area is zoned PD-H3. Revise "commercial toll road" as the Proposed Use on sheet 1, Project Description, and replace "Dulles Greenway" in Survey Note 3 on sheets 6 and 8, with "monopole". Provide the acreage of the subject site area in the Project Description box, on sheet 1, as well as Survey Note 4 on sheets 6 and 8.

***Response: Complied, please see Sheets 6 and 8.***

Staff Comment #13: On sheet 6 and 8, add a note that there are very steep and moderately steep slopes, but that neither is impacted by the proposal.

***Response: Complied.***

Staff Comment #14: Add to Survey Note 8 on sheet 6 and 8 that there is no floodplain within the subject area.

***Response: Complied.***

Staff Comment #15: On Sheet 8 of 11, revise the note in the second column as this is not a compound expansion and revise the note to reflect that the subject site is within the Dulles Election district.

***Response: Complied.***

**VIRGINIA DEPARTMENT OF TRANSPORTATION REFERRAL 11/25/09 (Thomas VanPoole, P.E., Senior Transportation Engineer)**

1. Staff Comment: The driveway should be perpendicular to the ramp.

***Response: Complied, please see Sheet 8, Z-5 and Sheet 9, Z-6.***

2. Staff Comment: The entrance should confirm to VDOT standard PE-1.

***Response: Complied, please see Sheet 8, Z-5 and Sheet 9, Z-6.***

3. Staff Comment: The entrance should be paved for a least 25' from the edge of the ramp pavement.

***Response: Complied, please see Sheet 8, Z-5 and Sheet 9, Z-6.***

**OFFICE OF TRANSPORTATION SERVICES REFERRAL 12/18/09 (Marc Lewis-DeGrace, Transportation Planner)**

Staff Comment: The provided traffic impact documents state that the proposed monopole will have a maximum of four (4) carriers. The provided plat indicates space for up to seven (7) carriers. For consistency, the Applicant should confirm the maximum number of carriers that will utilize this structure.

***Response: The monopole will support a maximum of seven (7) carriers. The traffic impact letter was incorrect and will be revised to say that the monopole, when fully leased, would support seven (7) carriers.***



January 13, 2010

Staff Comment: The proposed use will not generate a significant amount of traffic and thus road improvements are not requested from this Applicant. However, it is recommended that the Applicant coordinate with the owners of the Dulles Greenway (TRIP II) to ensure that the proposed monopole and equipment compound will not interfere with any future expansion of the Dulles Greenway.

**Response:** *CWS has a ground lease with TRIP II defining the compound area of the telecommunications site. This has been coordinated with the civil engineers and does not conflict with any planned future expansion of the Dulles Greenway.*

Staff Comment: The Applicant should confirm that the proposed entrance meets applicable commercial entrance requirements.

**Response:** *Complied, please see Sheet 8, Z-5 and Sheet 9, Z-6.*

COMMUNITY PLANNING REFERRAL December 7, 2009 (Pat Giglio, Planner III)

#### ANALYSIS

##### A. Land Use

##### Location

Staff Comment: Staff finds that no existing tall structures are currently located within the vicinity of the proposed site and that construction of a new telecommunication facility may be justified based on network coverage requirements.

**Response:** *Applicant agrees with staff that there are no existing tall structures located within the vicinity of the proposed site. However, Applicant has identified three structures of 40+ feet in height within a one mile radius of this site. Two of the structures are Loudoun County Public Schools Headquarters and Church of Jesus Christ of Latter Day Saints, which do not currently lease or license space to telecommunications carriers. The third structure, Our Savior's Way Evangelical Lutheran Church, which is located almost one mile from the site at Exit 5, Claiborne Parkway, is in the process of a CMPT/SPEX application process for T-Mobile USA to replace the church steeple for the placement of a telecommunications facility. The final height of the steeple will be 70 feet. Due to the nature of this build, the only carrier that can be accommodated is T-Mobile. The steeple will not have sufficient space for other carriers. This location will not satisfy the coverage requirements of the monopole proposed at Exit 5, Claiborne Parkway. The Applicant will revise the Statement of Justification to reflect this information.*

##### Design and Visual Impact

Staff Comment: Staff recommends that conditions of approval and the general notes of the plat specify the color, texture, and materials of the proposed monopole and ground-mounted equipment to ensure that the proposed construction is consistent with the submitted photo-simulations and drawings.

**Response:** *Applicant has revised plat to respond to this recommendation.*

Staff Comment: Staff recommends that the applicant commit to the long-term maintenance and care of the proposed fence and existing trees and vegetation to ensure that the proposed facility is adequately screened.

**Response:** *Applicant agrees to ensure that the proposed facility remains adequately screened by the fence and the trees and vegetation, as specified in the final conditions of approval at the time of the Approval of the SPEX.*

##### B. Safety and Health Policies

Staff Comment: Staff recommends that a condition of approval and/or plat note be included to require removal of



January 13, 2010

the facility and associated equipment following cessation of use.

**Response:** *Applicant has revised plat to respond to this recommendation.*

**ENVIRONMENTAL REVIEW TEAM REFERRAL** December 3, 2009 (Todd Taylor)

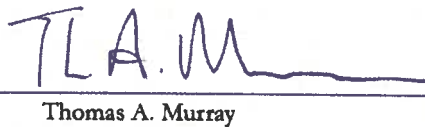
Staff Comment: Staff recommends that the applicant consider reforestation of the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management (SWM) pond, and existing tree stand.

**Response:** *Applicant will agree to plant seedlings in the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management (SWM) pond, and existing tree stand, and will work with ERT to develop a planting plan that is sustainable.*

We believe that this letter responds to all staff comments that we have identified.

On behalf of Community Wireless Structures, LLC, the Applicant, I request that our resolution of these issues be reviewed and that this application be set down for public hearing before the Loudoun County Planning Commission at the next available public hearing date.

COMMUNITY WIRELESS STRUCTURES, LLC

By:   
Thomas A. Murray  
Managing Member

CC: Ed Donohue, Colleen Canovas

A-37



## COMMUNITY WIRELESS STRUCTURES

February 19, 2010

Mike Elabarger, Project Manager, Planning  
Land Use Review, County of Loudon  
1 Harrison Street SE  
Leesburg, VA 20175

Re: SPEX 2009-0030 and CMPT 2009-0009 Exit 5: Claiborne Parkway – Dulles Greenway

Dear Mike:

Community Wireless Structures, LLC (CWS) acknowledges receipt of the 2<sup>nd</sup> referral comments from the Zoning Administration, the Virginia Department of Transportation, the Office of Transportation Services, the Community Planning and Environmental Review Team in the referenced land use application. This letter constitutes the response of CWS as applicant to those comments received in connection with this application.

Our responses are as follows:

**ZONING ADMINISTRATION 2<sup>nd</sup> REFERRAL** February 1, 2010 (Theresa M. Stein, Planner)

Staff Comment #1: Original comment #5: *"State the proposed square footage and height of the equipment structure per 5-618 (B)(3)(f)."* The applicant responded that the height and square footage of the equipment shelters are on sheet 10. The dimensions of the proposed equipment structures pads are on sheet 10, but the square footage and height of the equipment structures were not provided as requested. The comment remains outstanding.

**Response:** *Complied, please see under General Notes, note #2 on the right-hand side of Sheet 10.*

Staff Comment #2: Original comment #7: *"Demonstrate that location on an existing structure greater than 40' is not feasible per 5-618(B)(4)(b)."* Applicant responded in the January 13<sup>th</sup> letter that the information was "to be supplied by others". The revised Statement of Justification now includes the requested information on page 2 and 3, however, the Ordinance requires that the applicant demonstrate that antenna cannot be placed on existing structures over 40' in height. Alternative locations titled (a) and (b) in the Statement of Justification states that there are no "existing structures 50 feet or taller on this property". The applicant needs to explain why those sites cannot accommodate the proposed antenna as they exceed 40' in height. The reference to 50' height may be an error, and such information was provided to the applicant's representative via email on January 22<sup>nd</sup>.

**Response:** *The reference to 50 feet height on the original Statement of Justification was in error. The Statement of Justification has been revised to reflect that with respect to the alternative locations titled (a) and (b), there are no existing structures 40 feet or taller on the property.*

2800 SHIRLINGTON ROAD, SUITE 960 · ARLINGTON, VIRGINIA · 22206  
PHONE: 703-845-1971 · FAX: 703-845-1953

A-38

February 19, 2010

**ENVIRONMENTAL REVIEW TEAM 2<sup>nd</sup> REFERRAL** January 11, 2010 (Todd Taylor)

Staff Comment: In an electronic mail, dated January 6, 2010, the applicant states that they "agree to plant seedlings in the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management (SWM) pond, and existing tree stand, and will work with ERT to develop a planting plan that is sustainable". Staff appreciates this effort and believes that the planting will help recapture lost tree canopy, increase long-term screening of the proposed monopole, provide beautification along the Dulles Greenway, and reduce future maintenance costs associated with invasive plant removal. Staff recommends identifying the limits of the reforestation area on the special exception plat. The following condition language provides a means to achieve the reforestation recommendation:

*The applicant shall reforest the triangular shaped land located between the Dulles Greenway, the access ramp, and Claiborne Parkway, outside of the proposed monopole compound, existing stormwater management pond, and existing tree stand, as shown on the special exception plat. Existing scattered Eastern red cedar trees may be preserved and incorporated into the reforestation area. A reforestation plan shall be submitted to the County for review and approval, prior to site plan approval. The applicant shall obtain necessary permission from the owner of the property to be planted. In the event the owner does not grant permission, the applicant is not required to submit the reforestation plan or perform the planting.*

The recommendation is consistent with Forests, Trees and Vegetation Policy 7 which states that tree protection will be encouraged along roadways to allow trees to provide shading, reduce peak storm flows, and contribute to the enhancement of the green infrastructure [Revised General Plan (RGP), Page 5-32]. The recommendation is also consistent with the County's strategy to protect its existing green infrastructure elements and to recapture elements where possible [RGP, Page 6-8, Green Infrastructure Text]. The ERT and County Urban Forester are available to meet to discuss reforestation.

**Response:**

*Applicant agrees to the above condition language and agrees to submit a reforestation plan to the County for review and approval, prior to site plan approval.*

**VIRGINIA DEPARTMENT OF TRANSPORTATION 2<sup>nd</sup> REFERRAL** January 19, 2010 (Thomas VanPoole, P.E., Senior Transportation Engineer)

*VDOT determined that their November 25, 2009 referral comments had been addressed by the Applicant and, as such, they have no objection to the approval of the above-captioned applications.*

**OFFICE OF TRANSPORTATION SERVICES 2<sup>ND</sup> REFERRAL** February 18, 2010 (Marc Lewis-DeGrace, Transportation Planner)

*OTS determined that their December 18, 2009 referral comments had been addressed by the Applicant and, as such, they have no objection to the approval of the above-captioned applications.*

**COMMUNITY PLANNING 2<sup>nd</sup> REFERRAL** February 18, 2010 (Pat Giglio, Planner III)

*Community Planning determined that their December 7, 2009 referral comments had been addressed by the Applicant and, as such, they have no objection to the approval of the above-captioned applications.*

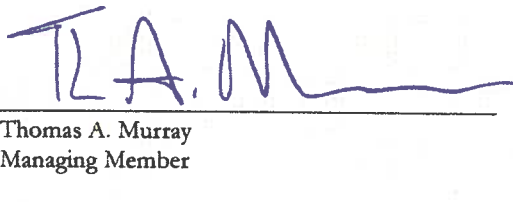
February 19, 2010

We believe that this letter responds to all staff comments that we have identified.

On behalf of Community Wireless Structures, LLC, the Applicant, I request that our resolution of these issues be reviewed and that this application be set down for public hearing before the Loudoun County Planning Commission at the next available public hearing date.

COMMUNITY WIRELESS STRUCTURES, LLC

By: \_\_\_\_\_

  
Thomas A. Murray  
Managing Member

CC: Ed Donohue, Colleen Canovas

A-40